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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/809,385

03/26/2004

Shigeru Muramatsu

0109/002001

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11/03/2005

SMITH PATENT OFFICE
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EXAMINER

LEYKIN, RITA

ART UNIT

PAPER NUMBER

2837

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/809,385

Applicant(s)

MURAMATSU, SHIGERU

Examiner

Rita Leykin

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/26/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Muramatsu US # 5,952,806.

Muramatsu teaches three-dimensional actuators 30 for driving a movable object 31, including sensors 32 for producing three kinds of positional data information X, Y, Z for controlling the three dimensional actuators 30. Fig. 12, 11, 22 and 25 show a performance input apparatus in form of electronic musical instrument operated by human to control the tone of sound on the basis of detecting signals, as also claimed in claims 2, 4, 10, (see Fig. 22, col. 24, lines 23-45).

Muramatsu discloses in Fig. 12 with respect to claims 1, 3, 5, 6, and 8:

- A base section in form of a stationary member 30g,h, j;
- An operating section 31 that is displaceable in response to operation by a human operator, relative to at least on displacement axis;
- A pivot section that includes a rotary shaft rotational about a pivot axis in response to the operation, is presented in form of actuators 30a,b,c that freely turn around points P/Q/R, (see col. 10, lines 35-44);

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- A detection section presented in form of detectors 32a, b, c, (see col.11, lines 14-32);
- A reactive force information generation section is presented in form of processor 33d that supplies the data signals representative of the reaction components $F_x/F_y/F_z$, based on detected positional signals;
- A reactive force generation section that imparts a reactive force to the operating section 31 presented in form of driving units 33f/33g/33h and plungers 30k/30m/30n, (see col. 11, lines 35-56, col. 12, lines 25-48);
- An output section that outputs a control signal responsive to human operator on the basis of detection signals is presented in form of vector arithmetic processor 33d, demultiplexers 33j of the driving unit 33f,g,h and PWM drivers 33k, that distribute data signals in such a manner that associated three dimensional actuators 32 exert the sets of components $F_x/F_y/F_z$ on the associated moving section 31 respectively.

With respect to claim 11 the placement of the device on ground or floor or table is inherent.

With respect to claims 3, 9, 12 and 13, Fig. 22 show an embodiment, wherein the operational section includes an operating arm 90a capable of rotating in directions of arrows AR20 and AR21, that suggests displacement in plurality of axes.

With respect to claim 7 the application of counter torque for each of the displacement axes to the operating section is inherent due to function of universal joint 30r.

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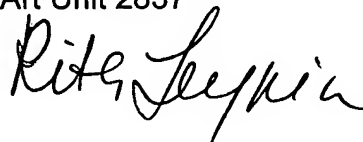
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita Leykin whose telephone number is (571)272-2066. The examiner can normally be reached on Monday-Friday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (571)272-2107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

R.L.

Rita Leykin
Primary Examiner
Art Unit 2837

A handwritten signature in black ink that reads "Rita Leykin". The signature is written in a cursive style with a large, stylized "R" and "L".